

**METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR
IMPLEMENTING PACKET ORDERING**

Abstract of the Disclosure

5 A method, apparatus, and computer program product are provided for
implementing packet ordering in a network processor. Packets are received
and placed on a receive queue and a queue entry is provided for each
received packet. The queue entry includes for each autoroute packet, an
autoroute indication and a selected transmit queue. An associated ordering
queue is provided with the receive queue. A software-handled packet is
10 dequeued from the receive queue and the dequeued software-handled
packet is placed on the ordering queue. Each autoroute packet reaching a
head of the receive queue is automatically moved to the selected ordering
queue.